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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,466	02/05/2001	James Jordan	10175-US	1564

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EXAMINER

PATEL, ASHOKKUMAR B

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 04/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/775,466	Applicant(s) JORDAN, JAMES	
	Examiner Ashok B. Patel	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. Application Number 09/775, 466 was filed on 02/05/2001. Claims 1-17 are subject to examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over GLAUERT et al. (hereinafter Glauert)(WO 00/65834) in view of Chui et al. (hereinafter Chui)(US 5, 841, 473)

Referring to claim 1,

The reference Glauert teaches a method of transferring data from a remote server to a remote client over a communications link (Fig.1, Abstract) comprising: sending a request from the remote client to the remote server for specific data accompanied by a compression request for transmission at a specified compression ratio (reference teaches specifying the image size, the image quality, the frame-rate and data rate); and teaches receiving said request for specific data at the remote server and retrieving said specific data from a data source; (page 30, lines 1-6). Although, the reference does disclose the methods for wavelet transform and compression, the reference fails to explicitly teach sending the compressed data and decompressing the received data.

The reference Chui teaches providing an agent at the remote server to intercept said retrieved data and compress at least part of said retrieved data prior to transmission in accordance with said compression request; transmitting said retrieved data in compressed form over said communications link to said remote client; and decompressing said compressed data at said remote client to restore said retrieved data to an uncompressed intelligible form. (col. 10, lines 36-67 and col.11, lines 1-3). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Glauert's client-driven image delivery method with Chui's compression and decompression method applied at the ends of communication network. Thus, the system provides provide a method and system of image compression and decompression in which the computational requirements on either the compression or decompression side can be kept relatively simple as taught by Chui.

Referring to claims 2, 3 and 4,

Keeping in mind the teachings of reference Glauert as stated above, the reference also teaches that the server will use information provided by the client to decide which sections of the image data (image portions of said data) should be sent to the client and at what rate. (page 30, lines 4-6). Although, the reference does disclose the methods for wavelet transform and compression, the reference fails to explicitly teach sending the compressed data and decompressing the received data. The reference Chui teaches lossy data compression techniques are also known in the art (compressed using a lossy compression algorithm). The defining characteristic of lossy data compression is, of

course, that the decompressed information cannot exactly match that of the original information; in other words, some information is lost in the compression of the input information. Lossy compression techniques can provide very high compression ratios, however, and as such are often used when the information to be compressed does not require exact bit-for-bit replication upon decompression. (col. 1, lines 41-49). The reference also teaches Wavelet-based compression techniques are also known in the art, and have been applied to still images and also motion pictures. (col.2, lines 19-21). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Glauert's client-driven image delivery method with Chui's compression method applied at an end of communication network with lossy compression algorithm comprising a discrete wavelet transform. Lossy compression techniques can provide very high compression ratios, however, and as such are often used when the information to be compressed does not require exact bit-for-bit replication upon decompression. As a result, lossy data compression techniques are useful in the compression of video or graphics images, audio signals, and other digital representation of analog information as taught by Chui.

Referring to claim 5,

Keeping in mind the teachings of reference Glauert as stated above, the reference also teaches that the server will use information provided by the client to decide which sections of the image data (image portions of said data) should be sent to the client and at what rate. (page 30, lines 4-6). Although, the reference does disclose the methods for wavelet transform and compression, the reference fails to explicitly teach sending the

compressed data and decompressing the received data. The reference Chui teaches one type of well-known data compression approach is referred to as lossless data compression, in which repetitive bits in the digital representation of information are combined. An example of lossless compression is commonly referred to as "byte packing. (col.1, lines 24-28). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Glauert's client-driven image delivery method with Chui's compression method applied at an end of communication network with lossless compression algorithm. Thereby, according to the defining characteristic of lossless compression, an exact copy of the input information is obtained upon decompression. Because of this feature, lossless compression is useful in the storage and communication of computer programs, numerical databases, and other information in which exact replication is a requirement as taught by Chui.

Referring to claims 6, 7, 8 and 9,

The reference Glauert teaches that the server will use information provided by the client to decide which sections of the image data (image portions of said data) should be sent to the client and at what rate. (page 30, lines 4-6). The reference also teaches that the client can specify (amongst other parameters) the image size, the image quality, the frame rate and the data rate (specific data at a reduced compression ratio). (page 30, lines 3-5)(wherein said specific data comprises a web page stored on a web server providing said data source). The reference also teaches that the client can request a playback where the playback parameters can specify the allowable value for any quality

parameters that are specified for the media. (page 30, lines 12-15). The reference also teaches that the techniques taught by this reference can be applied to other data types such as audio, graphics (identified portion comprises a portion of an image forming part of said web page) and animation. (page 37, lines 24-25). Although, the reference does disclose the methods for wavelet transform and compression, the reference fails to explicitly teach sending the compressed data and decompressing the received data. The reference Chui teaches lossy data compression techniques are also known in the art (compressed using a lossy compression algorithm). The defining characteristic of lossy data compression is, of course, that the decompressed information cannot exactly match that of the original information; in other words, some information is lost in the compression of the input information. Lossy compression techniques can provide very high compression ratios, however, and as such are often used when the information to be compressed does not require exact bit-for-bit replication upon decompression. (col. 1, lines 41-49). The reference also teaches Wavelet-based compression techniques are also known in the art, and have been applied to still images and also motion pictures. (col.2, lines 19-21). . The reference Chui teaches one type of well-known data compression approach is referred to as lossless data compression, in which repetitive bits in the digital representation of information are combined. An example of lossless compression is commonly referred to as "byte packing. (col.1, lines 24-28). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Glauert's client-driven image delivery method which offers playback feature where the playback parameters can specify the allowable value

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for any quality parameters that are specified for the media (remote client sends at least one further request for all or part said specific data at a reduced compression ratio for an identified portion) with the Chui's compression method applied at an end of communication network with lossy or lossless compression algorithm(specific data at a reduced compression ratio) comprising a discrete wavelet transform. Lossy compression techniques can provide very high compression ratios, however, and as such are often used when the information to be compressed does not require exact bit-for-bit replication upon decompression. As a result, lossy data compression techniques are useful in the compression of video or graphics images, audio signals, and other digital representation of analog information as taught by Chui. Also, according to the defining characteristic of lossless compression, an exact copy of the input information is obtained upon decompression. Because of this feature, lossless compression is useful in the storage and communication of computer programs, numerical databases, and other information in which exact replication is a requirement as taught by Chui.

Referring to claim 10,

The reference Glauert teaches a remote server for transferring data on demand to a remote client over a communications link (Fig.1 Abstract), comprising: a storage medium for storing transferable data (Fig.1, Media Sever); a processing unit for receiving a request from the remote client for specific data accompanied by a compression request for transmission at a specified compression ratio, said processing unit retrieving said data from a data source; (page 30, lines 1-6). Although, the reference does disclose the methods for wavelet transform and compression, the

reference fails to explicitly teach sending the compressed data and decompressing the received data. The reference Chui teaches an agent running on the remote server for intercepting said data retrieved from said data source and compressing at least part of said retrieved data prior to transmission in accordance with said compression request; and a port on said remote server for transmitting said retrieved data in compressed form over said communications link to said remote client, whereby said compressed data can be decompressed at said remote client to restore said retrieved data to an uncompressed intelligible form. . (col. 10, lines 36-67 and col.11, lines 1-3). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Glauert's client-driven image delivery method with Chui's compression and decompression method applied at the ends of communication network. Thus, the system provides provide a method and system of image compression and decompression in which the computational requirements on either the compression or decompression side can be kept relatively simple as taught by Chui.

Referring to claims 11, 12 and 13,

Claims 11, 12, and 13 are the claims to a remote server that carries out the method steps of claims 2, 3, and 4. Therefore, claims 11, 12 and 13 are rejected for the reasons set forth for the claims 2, 3 and 4.

Referring to claim 14,

Claim 14 is a claim to a remote server that carries out the method steps of claim 5. Therefore, claim 14 is rejected for the reasons set forth for the claim 5.

Referring to claims 15 and 16,

Claims 15 and 16 are the claims to a remote server that carries out the method steps of claims 6 and 7. Therefore, claims 15 and 16 are rejected for the reasons set forth for the claims 6 and 7.

Referring to claim 17,

Keeping in mind the teachings of reference Glauert as stated above, although the reference discloses server in Fig. 1, it fails to explicitly teach processing unit retrieving said data from a an Internet content server providing said data source. The reference Chui teaches the processing unit teach processing unit retrieving data from an Internet content server providing data source. (Fig. 5a, elements 46 and 48 and col. 10, lines 36-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify and enhance Glauert's client-driven image delivery method which offers playback feature where the playback parameters can specify the allowable value for any quality parameters that are specified for the media with the Chui's compression and decompression method applied at the ends of the network such that the data that stored in the database can retrieved as the user specifies as these techniques are useful in the compression and decompression of video or graphics images, audio signals, and other digital representation of analog information as taught by Chui.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (703) 305-2655. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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